

## **Numbers Fewer Smokers**

To give a sense of the magnitude of persons affected by small changes in the prevalence of tobacco use, the Department of Health provides information about the estimated number of current smokers, for adults (people eighteen or older) and for youth (children ages ten to seventeen) separately.

These numbers are estimates, and not intended to be a measure of success for the program. The success of the program is determined by significant changes in behavior among the population, not by the numbers of people in that population who change behavior.

For both adults and youth the estimates are “standardized” to the year 2000 populations. This is done because population size is increasing. If the year-specific population sizes were used to calculate the year-specific estimates, the picture of how smoking has decreased in the general population would be diminished (and eventually potentially washed away) by that overall population growth.

The year 2000 was chosen for standardization because it was a census year, and information about the population sizes for that specific year are likely to be more accurate than other (inter-censal) years.

For additional information:

Julia Dilley

Washington State Department of Health

Tobacco Prevention and Control Program

MS 47835, Olympia WA 98504-7835

(360) 236-3632

[Julia.Dilley@doh.wa.gov](mailto:Julia.Dilley@doh.wa.gov)

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## Estimated numbers of YOUTH smokers

Year	Actual population (10-17)	Mean smoking prevalence (avg for all grades) *	Number of smokers
1999	686179	20.25%	138,951
2000	693,628	15.6%	108,206
2002	708,035	12.3%	87,088

Number fewer youth smokers (actual 1999-2002) = 51,863

Year	Adjusted to 2000 population (10-17)	Mean smoking prevalence (avg for all grades) *	Number of smokers
1999	693,628	20.0%	138,726
2000	693,628	15.6%	108,206
2002	693,628	12.3%	85,316

Number fewer youth smokers (adjusted to population 2000) = 53,410

For youth, in comparison to adults, population size is not changing as rapidly which makes population standardization not as important. However, to be consistent with methods used for calculation and reporting of population size changes for adults, we will use the same methodology of standardization to the 2000 Census population.

Thus, the number fewer youth in Washington from the time prior to the program launch (1999) to the present (2002) can be described as 53,000 (rounded to the nearest thousand). A suggested statement for discussing this change is:

“If smoking levels had remained the same as prior to the program, there would be about 53,000 more youth smokers today in Washington. (adjusted for population growth)”

These numbers are likely an underestimate of the actual changes in population size youth smokers. They are calculated using prevalence estimates from the school-based “Healthy Youth Survey” (2002), “Washington State Survey of Adolescent Health Behaviors” (WSSAHB 2000), and the “Washington State Youth Risk Behavior Survey” (YRBS 1999). These surveys are conducted among youth enrolled in public schools, and therefore exclude youth who are not attending school, among whom there is likely to be a high rate of smoking. Also, there may be some youth under age ten who take up smoking, although this number is expected to be quite small. Thus, the estimated overall prevalences are likely to be a bit low.

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\* for 1999 overall prevalence estimation, because the survey was not conducted among 6<sup>th</sup> and 8<sup>th</sup> graders, we used rates for these grades from the previous year’s survey (1998)

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## Estimated numbers of ADULT smokers

Year	Actual adult population	Smoking prevalence <sup>+</sup>	Number of smokers
1999	4,311,892	22.4%	965,864
2000	4,380,278	--	--
2002	4,519,053	20.5%	926,406

Number fewer adult smokers (actual 1999-2002) = 39,458

Year	Adjusted to 2000 adult population	Smoking prevalence <sup>+</sup>	Number of smokers
1999	4,380,278	22.4%	981,182
2002	4,380,278	20.5%	897,957

Number fewer adult smokers (adjusted to population 2000) = 83,225

For adults, population size is growing fairly rapidly. Standardization to the 2000 Census population provides a way of quantifying the changes in numbers of people (to communicate the point that “a lot of people have been affected” which might be lost when talking about a small prevalence change of 1.9%).

Thus, the number fewer adult smokers in Washington from the time prior to the program launch (1999) to the present (2002) can be described as 83,000 (rounded to the nearest thousand). A suggested statement for discussing this change is:

“If smoking levels had remained the same as prior to the program, there would be about 83,000 more adult smokers today in Washington. (adjusted for population growth)”

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<sup>+</sup> Measured using the State Behavioral Risk Factor Surveillance System (BRFSS). For 2002, the prevalence is preliminary, and was calculated using the first 6 months of that year's data (January-June).

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